## Attachment 13 (EMD Summary)

## WBS

	Total 94\$ Total TY\$
Air vehicle	1.0
Airframe:	1.1
Non recurring:	1.1.1
Non recurring, non test engineering	1.1.1.1
Non recurring tooling	1.1.1.2
Non recurring tooling Quality Assurance	1.1.1.3
Non recurring Purchased Equipment	1.1.1.4
Non recurring Raw Materials/Purchased Parts	1.1.1.5
Recurring:	1.1.2
Recurring engineering	1.1.2.1
Recurring tooling	1.1.2.2
Manufacturing	1.1.2.3
Quality Assurance	1.1.2.4
Recurring Purchased Equipment	1.1.2.5
Recurring Raw Materials/Purchased Parts	1.1.2.6
Propulsion:	1.2
GFE IPT Managed Cruise engine non recurring	1.2.1
CFE Lift System non recurring development	1.2.2
CFE Other Cruise Engine non recurring development	1.2.3
GFE IPT Managed Cruise engine recurring	1.2.4
CFE Lift System recurring	1.2.5
CFE Other Cruise Engine recurring	1.2.6
Mission Systems:	1.3
Mission Systems Suite integration	1.3.1
Hardware Design	1.3.1.1
Hardware Build	1.3.1.2
Software	1.3.1.3
Radar Front End	1.3.2
Hardware Design	1.3.2.1
Hardware Build	1.3.2.2
Software	1.3.2.3
CNI Front End	1.3.3
Hardware Design	1.3.3.1
Hardware Build	1.3.3.2
Software	1.3.3.3
EW Front End	1.3.4
Hardware Design	1.3.4.1
Hardware Build	1.3.4.2
Software	1.3.4.3
Radar CE	1.3.5
Hardware Design	1.3.5.1
Hardware Build	1.3.5.2
Software	1.3.5.3
CNI CE	1.3.6
Hardware Design	1.3.6.1
Hardware Build	1.3.6.2
Software	1.3.6.3

EW CE	1.3.7
Hardware Design	1.3.7.1
Hardware Build	1.3.7.2
Software	1.3.7.3
ICP	1.3.8
Hardware Design	1.3.8.1
Hardware Build	1.3.8.2
Software	1.3.8.3
EO/IR (DIRS)	1.3.9
Hardware Design	1.3.9.1
Hardware Build	1.3.9.2
Software	1.3.9.3
EO/IR (TFLIR)	1.3.10
Hardware Design	1.3.10.1
Hardware Build	1.3.10.2
Software	1.3.10.3
C&D	1.3.11
Hardware Design	1.3.11.1
Hardware Build	1.3.11.2
Software	1.3.11.3
VMS	1.3.12
Hardware Design	1.3.12.1
Hardware Build	1.3.12.2
Software	1.3.12.3
SMS	1.3.13
Hardware Design	1.3.13.1
Hardware Build	1.3.13.2
Software	1.3.13.2
MISSION 2	1.3.14
Hardware Design	1.3.14
Hardware Build	1.3.14.1
Software Sund	1.3.14.2
SERVICE UNIQUE	1.3.14.3
CTOL	1.3.14
Hardware Design Hardware Build	1.3.14.1.1 1.3.14.1.2
Software	1.3.14.1.2
222	1.3.14.1.3
SERVICE UNIQUE CV	1.3.14.2
	1.3.14.2
Hardware Design Hardware Build	1.3.14.2.1
Software	
	1.3.14.2.3
SERVICE UNIQUE STOVL	1 2 14 2
	1.3.14.3
Hardware Design	1.3.14.3.1
Hardware Build	1.3.14.3.2
Software	1.3.14.3.3
Armament	1.4
Gun System	1.4.1
Weapons carriage and launch equipment	1.4.2

Systems Test and Evaluation	2.0
Requirements	2.1
Contractor Ground Test	2.2
Static	2.2.1
Fatigue	2.2.2
Drop	2.2.3
Wind Tunnel	2.2.4
Subsystems	2.2.5
Contractor Flight Test	2.3
Flight Test	2.3.1
Flight Test Support	2.3.2
Mockups	2.4
Flight Simulation/VMS	2.5
Survivability	2.6
Tech Evaluation/OPEVAL Support	2.7
Other	2.8
Systems Engineering/Program Management	3.0
Non-ILS SEPM	3.1
ILS SEPM	3.2
Fraining	4.0
Equipment	4.1
Hardware	4.1.1
Software	4.1.2
Services	4.2
Facilities	4.3
Support	5.0
Test and Measurement Equipment	5.1
Support and Handling Equipment	5.2
Prognostics & Health Management (PHM) Ground	5.2.1
Mission Planning	5.2.2
Data	6.0
Spares	7.0
Ancillary Equipment	8.0